

Claim Amendments

Claim 1 (currently-amended). An electrical resistor,
comprising:

a resistance zone formed of a metal alloy;

connections;

electrically conductive power supply leads constructed as
busbars; and

an insulating layer between said power supply leads for
electrically insulating and thermally coupling said power
supply leads;

said power supply leads connected to said connections;

said power supply leads running parallel to one another;

said power supply leads have ends remote from said resistance
zone; and

said ends of said power supply leads being constructed as
connection contacts.

Claim 2 (previously-amended). The electrical resistor according to claim 1, comprising:

another electrically insulating and thermally conducting layer; and

a construction including said resistance zone and said power supply leads except for said connection contacts;

said other insulating layer surrounding said construction.

Claim 3 (previously-amended). The electrical resistor according to claim 2, comprising:

an electrically and thermally conducting layer surrounding said construction and said other insulating layer.

Claim 4 (original). The electrical resistor according to claim 1, wherein said power supply leads are intermeshed in one another.

Claim 5 (original). The electrical resistor according to claim 1, wherein said power supply leads are of coaxial design.

Claim 6 (original). The electrical resistor according to claim 1, wherein said power supply leads are configured in a manner selected from the group consisting of being stacked and being rolled up like a wound capacitor.

Claim 7 (currently-amended). An electrical resistor assembly, comprising:

an electrical resistor to be protected from adjacent structural parts producing heat or cold, said electrical resistor including:

a resistance zone formed of a metal alloy;

connections;

electrically conductive power supply leads constructed as busbars; and

an insulating layer between said power supply leads for electrically insulating and thermally coupling said power supply leads;

said power supply leads connected to said connections;

said power supply leads running parallel to one another;

said power supply leads have ends remote from said resistance zone;

said ends of said power supply leads being constructed as connection contacts; and

a protective barrier made of thermally non-conducting material disposed between said electrical resistor and the adjacent structural parts producing heat or cold.

Claim 8 (new). An electrical resistor, comprising:

a resistance zone;

connections having dimensions;

electrically conductive power supply leads constructed as busbars, said electrically conductive power supply leads having a width and a thickness corresponding to said dimensions of said connections; and

an insulating layer between said power supply leads for electrically insulating and thermally coupling said power supply leads;

said power supply leads connected to said connections;

said power supply leads running parallel to one another;

said power supply leads have ends remote from said resistance zone; and

said ends of said power supply leads being constructed as connection contacts.

Claim 9 (new). The electrical resistor according to claim 1, wherein said connections have dimensions and said electrically conductive power supply leads have a width and thickness corresponding to said dimensions of said connections.

Claim 10 (new). The electrical resistor according to claim 1, wherein said metal alloy is manganin.

Claim 11 (new). The electrical resistor according to claim 7, wherein said metal alloy is manganin.